

3rd Biennial CALFED Bay-Delta Program Science Conference

**Sacramento Convention Center
1400 J Street
Sacramento, California**

GETTING RESULTS: Integrating Science and Management to Achieve System-Level Responses

The Biennial **CALFED Bay-Delta Program Science Conference** is a forum for presenting scientific information and ideas relevant to the Program's goals and objectives in the Bay-Delta, its watershed, and the adjacent coastal ocean. The goal of the conference is to provide new information (i.e., results, models, syntheses, analyses) to the broad community of scientists, engineers, managers, and stakeholders working on Bay-Delta Program-related issues.

The conference program features a mix of plenary and contributed talks and poster presentations on topical themes of interest. The late afternoon poster sessions and receptions provide an opportunity for discussion between presenters and attendees.

CONFERENCE ORGANIZING COMMITTEE

Conference Co-chairs:

Randall L. Brown (DWR, retired)
Frederic H. Nichols (USGS, retired)

Program Co-chairs:

Anke Mueller-Solger (DWR)
David Schoellhamer (USGS)

Logistics Co-chairs:

Marcia Brockbank (SFEP)
Karen McDowell (SFEP)

Poster Session Co-chairs:

Bellory Fong (CBDA)
Jana Machula (CBDA)

Student Judging Co-chairs:

Joseph Cech (UC Davis)
Ken Hashagen (CDFG, retired)
Ken Lentz (USBR)

Committee Members:

Pat Akers (CDFA)
Rick Breitenbach (CBDA)
Larry Brown (USGS)
Lauren Buffaloe (CBDA)
Mike Connor (SFEI)
Pat Coulston (CDFG)
Roger Fujii (USGS)
Margaret Gidding (CBDA)
Amy Hutzler (CCC)
Zachary Hymanson (CBDA)
Diana Jacobs (CDFG)
Rick Morat (USFWS)
Tim Ramirez (CBDA)
Kim Taylor (CBDA)



October 4–6, 2004 Sacramento Convention Center Sacramento, California

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Conference Schedule

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Wednesday, October 6, 2004 8-10

Registration Information 11

Student presentations are denoted with an asterisk.

SCHEDULE AT A GLANCE

Plenary Session Room 202-204

8:00 AM
Registration

9:00-10:10 AM
Plenary Session

10:10-10:30 AM BREAK

10:30 AM-12:00 PM
Plenary Session

12:00-1:10 PM LUNCH

Fish Room 313

1:10-2:50 PM
Fish Protection (I)
Session Chair: Robert W. Fujimura,
CDFG

Watershed/Levees Room 314

1:10-2:50 PM
Lessons from the Jones Tract
Levee Breach (I)
Session Chair: Christopher S. Enright,
DWR

Ecosystem Room 315

1:10-2:50 PM
Key Species and Communities in
Bay-Delta Habitats (I)
Session Chair: Bruce Herbold, US EPA

Water Quality Room 202

1:10-2:50 PM
What Restoration Ecologists Should
Know About Mercury (I)
Session Chair: Jay A. Davis, SFEI

Integrative Science Room 203

2:50-3:10 PM BREAK

3:10-4:50 PM
Fish Protection (II)
Session Chair: Robert W. Fujimura,
CDFG

3:10-4:50 PM
Lessons from the Jones Tract
Levee Breach (II)
Session Chair: Curtis C. Schmutte,
DWR

3:10-4:50 PM
Key Species and Communities in
Bay-Delta Habitats (II)
Session Chair: Bruce Herbold, US EPA

3:10-4:50 PM
What Restoration Ecologists Should
Know About Mercury (II)
Session Chairs: Mark Marvin-DiPasquale,
USGS, and Joshua N. Collins, SFEI

5:00-8:00 PM Poster Session and Reception—Ball Room (Third Floor)

MONDAY
October 4, 2004

TUESDAY

October 5, 2004

8:30–10:10 AM
Central Valley Salmonids (I)
Session Chair: Randall L. Brown, DWR (retired)

8:30–10:10 AM
Floodplains and Riparian Systems (I)
Session Chair: Jeff Opperman, UC Davis

8:30–10:10 AM
Indicators of Wetland Condition (I)
Session Chair: Susan L. Anderson, BML

8:30–10:10 AM
Drinking Water Quality (I): Protection
Session Chair: William H. Glaze, Oregon Health & Science Univ.

8:30–10:10 AM
Storing and Sharing Environmental Data and Information
Session Chair: James S. Quinn, UC Davis

10:10–10:30 AM BREAK

10:30 AM–12:10 PM
Central Valley Salmonids (II)
Session Chair: Randall L. Brown, DWR (retired)

10:30 AM–12:10 PM
Floodplains and Riparian Systems (II)
Session Chair: Jeff Opperman, UC Davis

10:30 AM–12:10 PM
Indicators of Wetland Condition (II)
Session Chair: Susan L. Anderson, BML

10:30 AM–12:10 PM
Drinking Water Quality (II): Watersheds
Session Chair: Brian Bergamaschi, USGS

10:30 AM–12:10 PM
Integrating Science and Management
Session Chair: Zachary C. Hymanson, CBDA

12:10–1:10 PM LUNCH

1:10–2:50 PM
Central Valley Salmonids (III)
Session Chair: Randall L. Brown, DWR (retired)

1:10–2:50 PM
Floodplains and Riparian Systems (III)
Session Chair: Jeff Opperman, UC Davis

1:10–2:50 PM
Re-Emergence of Shallow Water Ecosystems Across the Bay and Delta (I)
Session Chair: Charles A. Simenstad, Univ. of Washington

1:10–2:50 PM
Drinking Water Quality (III): Delta
Session Chair: Lisa Holm, CBDA

1:10–2:50 PM
Data and Advocacy-What Is the Role for Environmental Justice? (I)
Session Chair: Paula A. Daniels, UCLA

2:50–3:10 PM BREAK

3:10–4:50 PM
Central Valley Salmonids (IV)
Session Chair: Randall L. Brown, DWR (retired)

3:10–4:50 PM
Watershed Perspectives: Collaboration to Ecosystem Processes (I)
Session Chairs: Ted M. Frink, DWR, and Stefan G. Lorenzato, DWR

3:10–4:50 PM
Re-Emergence of Shallow Water Ecosystems Across the Bay and Delta (II)
Session Chair: Charles A. Simenstad, Univ. of Washington

3:10–4:50 PM
Drinking Water Quality (IV): Treatment Technologies
Session Chair: Pankaj Parekh, Los Angeles Dept. of Water & Power

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Data and Advocacy-What Is the Role for Environmental Justice? (II)
Session Chair: Paula A. Daniels, UCLA

5:00–8:00 PM Poster Session and Reception—Ball Room (Third Floor)

8:30–10:10 AM
Central Valley Salmonids (V)
Session Chair: Randall L. Brown, DWR (retired)

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Watershed Perspectives: Collaboration to Ecosystem Processes (II)
Session Chairs: Stefan G. Lorenzato, DWR, and Ted M. Frink, DWR

8:30–10:10 AM
Physical Controls on Habitats and Restoration
Session Chair: Mark T. Stacey, UC Berkeley

8:30–10:10 AM
Contaminants: Sources and Effects (I)
Session Chair: Joy Cooke Andrews, CSU Hayward

8:30–10:10 AM
Water Supply
Session Chair: Gerald E. Johns, DWR

10:10–10:30 AM BREAK

10:30 AM–12:10 PM
Native and Resident Fishes (I)
Session Chairs: Frederick V. Feyrer, DWR, and Matthew L. Nobriga, DWR

10:30 AM–12:10 PM
Managing and Restoring Big Rivers Below Big Dams (I)
Session Chair: Tim Ramirez, CBDA

10:30 AM–12:10 PM
Effects and Management of Nonnative Invasive Species
Session Chair: Lia McLaughlin, US FWS

10:30 AM–12:10 PM
Contaminants: Sources and Effects (II)
Session Chair: Kathryn M. Kuivila, USGS

10:30 AM–12:10 PM
Climate (I)
Session Chair: Michael Dettinger, USGS

12:10–1:10 PM LUNCH

1:10–2:50 PM
Native and Resident Fishes (II)
Session Chairs: Frederick V. Feyrer, DWR, and Matthew L. Nobriga, DWR

1:10–2:50 PM
Managing and Restoring Big Rivers Below Big Dams (II)
Session Chair: Scott M. McBain, McBain & Trush

1:10–2:50 PM
Restoring and Managing California's Native Grasslands (I)
Session Chair: Jeanne L. Wirka, Audubon California Landowner Stewardship Program

1:10–2:50 PM
Water and Sediment Quality (I)
Session Chair: Christopher G. Foe, CVRWQCB

1:10–2:50 PM
Climate (II)
Session Chair: Daniel R. Cayan, Scripps Institution of Oceanography and USGS

2:50–3:10 PM BREAK

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Native and Resident Fishes (III)
Session Chairs: Frederick V. Feyrer, DWR, and Matthew L. Nobriga, DWR

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Managing and Restoring Big Rivers Below Big Dams (III)
Session Chair: Bruce K. Orr, Stillwater Sciences

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Session Chair: Jeanne L. Wirka, Audubon California Landowner Stewardship Program

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Session Chair: Christopher G. Foe, CVRWQCB

3:10–4:50 PM
Climate (III)
Session Chair: Kelly Redmond, Desert Research Institute

4:50 PM ADJOURN

WEDNESDAY

October 6, 2004

MONDAY • OCTOBER 4

Plenary Session Rooms 202–204

8:00 AM

Registration

9:00 AM

Welcome

Johnnie Moore, California Bay-Delta Authority

9:05 AM

Science for Dummies—the Management Connection

Patrick Wright, California Bay-Delta Authority

9:20 AM

CALFED Science in the Anthropocene

Johnnie Moore, California Bay-Delta Authority

9:45 AM

Carbon, Sulfur and Mercury—A Biogeochemical Axis of Evil

George Aiken, United States Geological Survey

10:10 AM

BREAK

10:30 AM

Flood Control that Leaks and Dredging that Matters: Making Ecosystem Restoration Work in the Real World

Denise Reed, University of New Orleans

10:55 AM

The Future of California's Inland Fishes

Peter Moyle, University of California, Davis

11:20 AM

Subsidence, Sea Level and Seismicity: Hell and High Water in the Delta

Jeff Mount, University of California, Davis

11:45 AM

Questions for Plenary Speakers

12:00–1:10 PM

LUNCH

Fish Room 313

Fish Protection (I)

Session Chair: Robert W. Fujimura, CDFG

- 1:10 PM **History, Fishery Investigations of Clifton Court Forebay, Contra Costa County, California**
Dan B. Odenweller, NOAA Fisheries
- 1:30 PM **Integrating Multiple Datasets to Estimate Entrainment Loss of Fishes**
Christina Swanson, UC Davis
- 1:50 PM **A Kinematic Analysis of Fish Swimming Behavior within Louvered Channels: Identifying Sources of Attraction/Repulsion**
Bertrand H. Lemasson*, Utah State Univ.
- 2:10 PM **Facilitating Adult Sturgeon Passage in the Sacramento-San Joaquin Watershed, Towards Increased Spawning Opportunities and Population Rehabilitation**
Jason D. Webber*, UC Davis and SDSU
- 2:30 PM **Towards Protecting Sacramento-San Joaquin Watershed Green Sturgeon: Swimming Performance Relationships with Seawater Tolerance and Temperature** Peter J. Allen*, UC Davis

2:50 PM

Fish Protection (II)

Session Chair: Robert W. Fujimura, CDFG

- 3:10 PM **Fish Passage Studies at the Suisun Marsh Salinity Control Gates in Montezuma Slough**
Robert F. Vincik, CDFG
- 3:30 PM **Is the Sacramento River the Source of Green Sturgeon Aggregating in San Pablo Bay?**
Joshua A. Israel*, UC Davis
- 3:50 PM **Evaluation of Battle Creek Chinook and Steelhead Restoration Project Effectiveness: Fish Habitat and Production Modeling**
Russ T. Brown, Jones & Stokes Associates
- 4:10 PM **Fish Passage, Groundwater, and Baseflow—The Case of the Cosumnes River**
Graham E. Fogg, UC Davis
- 4:30 PM **Using the EWA to Protect Delta Smelt: Do the “Shoulders on VAMP” Make a Difference?**
Zachary P. Hymanson, CBDA

4:50 PM

5–8:00 PM

Levees Room 314

Lessons from the Jones Tract Levee Breach (I)

Session Chair: Christopher S. Enright, DWR

- Delta Levee Emergency Response Planning in Light of Jones Tracts Flood**
Thomas Zuckerman, Central Delta Water Agency
- Lessons Learned from the Jones Tract Levee Break**
William Burkhard, DWR
- Effects of the Jones Track Levee Failure on Central Valley Project and State Water Project Operations**
John Leahigh, DWR
- Numerical Modeling of Hydrodynamic and Salinity Impacts of the Upper Jones Tract Levee Breach**
John DeGeorge, Resource Management Associates, Inc.
- Fishery Effects of the 2004 Jones Tract Levee Failure**
Pat Coulston, CDFG

Lessons from the Jones Tract Levee Breach (II)

Session Chair: Curtis C. Schmutte, DWR

- Levees, Vegetation and Habitat in the Sacramento-San Joaquin Delta — Can They Coexist?**
Jeffrey A. Hart, Hart Restoration, Inc.
- Geomorphic and Geologic Mapping for Restoration Planning, Sacramento-San Joaquin Delta Region**
Christopher Hitchcock, William Lettis & Associates, Inc.
- Deformation of Delta Levees**
R. Kevin Tillis, Hultgren-Tillis Engineers
- Levee Integrity and Subsidence: Tied at the Hip for the Future of the Delta**
Christopher S. Enright, DWR
- Session Summary: Long-Term Planning and Research Needs for Delta Levees**
Jeff Mount, UC Davis

Ecosystem Room 315

Key Species and Communities in Bay-Delta Habitats (I)

Session Chair: Bruce Herbold, US EPA

- Ecosystem-Level Changes Following Food-web Disruption by an Introduced Clam in the San Francisco Estuary**
Wim Kimmerer, SFSU
- Protozoans Fuel Zooplankton Production in the Low-Salinity Zone of the San Francisco Estuary**
Paola Bouley*, SFSU
- Food Resources for Calanoid Copepods in the Sacramento-San Joaquin River Delta**
Catherine J. Hall, UC Davis
- Distribution and Grazing Potential of *Corbicula fluminea* in the Sacramento-San Joaquin Delta**
Francis Parchaso, USGS
- Stable Isotopes Unravel the Mystery of Intraspecific Contaminant Variability in Top Predators in San Francisco Bay**
A. Robin Stewart, USGS

Key Species and Communities in Bay-Delta Habitats (II)

Session Chair: Bruce Herbold, US EPA

- Macroinvertebrate and Fish Abundances Compared in Restored and Historical Marshes of San Francisco Estuary**
Christopher L. Kitting, CSU Hayward
- Using Long-Term Benthic Monitoring Data to Inform Restoration**
Heather A. Peterson, USGS
- Benthic Macroinvertebrates as Indicators of Riparian Habitats in Impacted Urban Streams**
Andree M. Breaux, SFBWQCB
- Annual Salt Marsh Harvest Mouse Demography and Habitat Use in Suisun Marsh Conservation Areas**
Diego Sustaita*, CDFG and CSU Northridge
- Assessment of Sandhill Crane Ecology in the Sacramento-San Joaquin Delta, California, 2002-03**
Gary L. Ivey, Wildlife and Wetlands Consultant

Water Quality Room 202

What Restoration Ecologists Should Know About Mercury (I)

Session Chair: Jay A. Davis, SFEI

- A Unifying Framework for Science, Management, and Ecological Restoration in a Mercury-Contaminated Ecosystem**
James G. Wiener, Univ. of Wisconsin-La Crosse
- The Meaning of Methylmercury to Wetland Managers: Helping Make Science Relevant to Management**
Joshua N. Collins, SFEI
- Mercury Cycling Concepts Important in the Adaptive Management of Wetland Restoration Projects**
Mark Marvin-DiPasquale, USGS
- Relative Mercury/Methylmercury Concentrations at Wet and Dry Seasons Prior to Wetlands Reconstruction at HAAF**
Victor A. McFarland, US Army ERDC
- Methylmercury Mass Balance for the Freshwater Sacramento-San Joaquin Bay-Delta Estuary**
Chris G. Foe, CVRWQCB

What Restoration Ecologists Should Know About Mercury (II)

Session Chairs: Mark Marvin-DiPasquale, USGS, and Joshua N. Collins, SFEI

- The Role of Biosentinel Organisms in the Mercury Strategy: Performance Measures of Restoration and Remediation**
Darell G. Slotton, UC Davis
- Fish Mercury in the Bay-Delta Watershed: A Dark Cloud with a Silver Lining**
Jay A. Davis, SFEI
- Particle-Size Distribution and Mercury Geochemistry of Sediments Affected by Large-Scale Gold Dredging, Yuba River, California**
Michael P. Hunerlach, USGS
- Minimizing Mercury Mobility and Methylation in the Clear Creek and Trinity River Restoration Projects, California**
James J. Rytuba, USGS
- Mercury Occurrence in Dredger Tailings, Sediment and Biota on the Lower Merced River**
Maia S. Fleming-Singer, Stillwater Sciences

BREAK

BREAK

POSTER SESSION AND RECEPTION—Ballroom (Third Floor)

*Denotes student presenter

TUESDAY • OCTOBER 5

Fish Room 313

Central Valley Salmonids (I)

Session Chair:
Randall L. Brown, DWR (retired)

- 8:30 AM **Historical Population Structure and Current Status of Chinook Salmon and Steelhead in the Central Valley**
Steven T. Lindley, NOAA Fisheries
- 8:50 AM **Microsatellite Analyses of Central Valley Trout Populations, 1999-2003**
Jennifer L. Nielsen, USGS
- 9:10 AM **Genetic Population Structure of Chinook Salmon in the California Central Valley**
Scott M. Blankenship, NOAA
- 9:30 AM **Apparent Alteration of Sexual Differentiation of Fall-Run Chinook Salmon in the Central Valley**
Kevin S. Williamson*, UC Davis
- 9:50 AM **Understanding the Genetic Basis of Migration Timing in Chinook Salmon, *Oncorhynchus tshawytscha***
Kathleen G. O'Malley*, OSU

10:10 AM

Central Valley Salmonids (II)

Session Chair:
Randall L. Brown, DWR (retired)

- 10:30 AM **Feather River Juvenile Steelhead: Abundance and Rearing Habits in a Regulated, Hatchery Influenced River System**
Bradley J. Cavallo, DWR
- 10:50 AM **Differences Between Hatchery and Wild Steelhead: Evidence from Delta Fish Monitoring Programs**
Steve Foss, CDFG
- 11:10 AM **Life History Diversity in Sacramento River Steelhead**
Robert G. Titus, CDFG
- 11:30 AM **Alternation of Anadromous and Non-Anadromous Life Histories in Rainbow Trout *Oncorhynchus mykiss* from California Rivers**
Christopher J. Donohoe, NMFS
- 11:50 AM **Infectious Hematopoietic Necrosis Virus (IHNV) in California: Epidemiology and Evolution**
Scott Foott, USFWS

Watershed Room 314

Floodplains and Riparian Systems (I)

Session Chair:
Jeff Opperman, UC Davis

- Functional Floodplains: How Much Do We Have Now, How Much Can We Restore?**
Elizabeth S. Andrews, PWA
- Restoring the Cosumnes River Floodplain: How Often Should It Flood and What Constitutes Success?**
Edwin D. Grosholz, UC Davis
- Floodplain Hydrobiogeochemistry as Revealed by High Resolution Spatiotemporal Sampling**
Erika L. Gallo*, UC Davis
- Bioavailability and Nutritional Quality of Organic Matter in a Cosumnes River Floodplain**
Anke B. Mueller-Solger, UC Davis and DWR
- Carbon Production in the Yolo Bypass Floodplain, California**
Peggy W. Lehman, DWR

Floodplains and Riparian Systems (II)

Session Chair:
Jeff Opperman, UC Davis

- Alien Shrimp Invaders: Tails from the Yolo Bypass Floodplain**
Ted R. Sommer, DWR
- Three Years of Sampling Restored Habitat as Part of the Napa River Flood Protection Project**
Michael L. Dietl, US ACE
- Floodplain Restoration: Articulation, Testing and Refinement—Connectivity between the San Joaquin River and Its Floodplain**
Chris B. Bowles, PWA
- Response of Active and Passive Riparian Revegetation on Dredge Tailing-Constructed Floodplains, Clear Creek, Shasta County, California**
Jeff Souza, Souza Environmental Solutions
- Using Riparian-Stream Metrics to Measure Change and Develop Restoration Goals for the Lower Mokelumne River**
Brook R. Edwards, USDA

Ecosystem Room 315

Indicators of Wetland Condition (I)

Session Chair: Susan L. Anderson, BML

- Integrated Regional Wetland Monitoring Pilot Project—Overall Project Purpose and Conceptual Models**
Stuart W. Siegel, WWR
- Integrating Indicators of Toxicant Exposure and Effect in Salt Marsh Species: Complementing the Eco-Risk Paradigm**
Susan L. Anderson, BML
- Remote Sensing of Wetland Conditions in West Coast Salt Marshes**
Susan L. Ustin, UC Davis
- Understanding Tidal Marsh Fragmentation: Analytical Approach, Emerging Hypotheses, and Relevance to Tidal Marsh Restoration**
Joshua N. Collins, SFEI
- Biomarker Responses in Native Species: Linkage to Sediment Chemistry and Population Parameters**
Gary N. Cherr, UC Davis

Indicators of Wetland Condition (II)

Session Chair:
Susan L. Anderson, BML

- Lined Shore Crab as an Indicator of Reproductive Impairment in Wetlands**
Steven G. Morgan, UC Davis
- Pesticides in California Wetlands: Integrating Exposure and Effects**
Kathryn M. Kuivila, USGS
- Mercury Accumulation in Crabs as an Indicator of Integrated Hg-Bioavailability in Northern California Estuaries**
Douglas C. Nelson, UC Davis
- Rapid Analysis of Salt Exudates from Marsh Plants: Implications to Ecotoxicity and Bioavailability**
Peter G. Green, UC Davis

PANEL DISCUSSION Indicators of Wetland Condition

Moderator: Susan L. Anderson, BML

Water Quality Room 202

Drinking Water Quality (I): Protection

Session Chair: William H. Glaze, Oregon Health & Science Univ.

- ELPH, Multiple Barriers, and Drinking Water Quality**
William H. Glaze, Oregon Health & Science Univ.
- Drinking Water Regulatory Challenges to Bay Delta Water Users**
Bruce A. MacIer, US EPA
- Challenges Facing Drinking Water Utilities**
Samantha A. Salvia, CC Water District
- Integrating Science and Management in the CBDA Drinking Water Quality Program**
Sam Harader, CBDA
- A Synthesis of Processes Affecting DOM in the Sacramento-San Joaquin Delta: What Do We Know?**
Brian A. Bergamaschi, USGS

Drinking Water Quality (II): Watersheds

Session Chair:
Brian Bergamaschi, USGS

- Carbon and Disinfection Byproduct Precursor Loads from a Restored Wetland in the Sacramento-San Joaquin Delta**
Jacob A. Fleck, USGS
- Using In-Situ Optical Instrumentation to Measure DOC Character and Fluxes from a Tidal Wetland**
Bryan D. Downing, USGS
- Processes Affecting Agricultural Drain Flow and Water Quality on Twitchell Island**
Steven J. Deverel, HydroFocus, Inc.
- Resolving Aquatic/Terrestrial Sources of Dissolved Organic Matter in the Sacramento-San Joaquin Delta by Radiocarbon Dating**
Carol L. DiGiorgio, DWR
- Organic Carbon Loading to the Sacramento River from a Rapidly Urbanizing Watershed in Sacramento's Metropolitan Area**
Michael J. Zanoli, DWR

Integrative Science Room 203

Storing and Sharing Environmental Data and Information

Session Chair: Jim S. Quinn, UC Davis

- Data Management and Sharing Infrastructure**
Karl C. Jacobs, DWR
- Ensuring Water Quality Data Comparability by Integrating Metadata in the Database**
Marc P. Vayssières, DWR
- CalClim: An Accessible Data Archive to Monitor California Climate**
Laura M. Edwards, Desert Research Institute
- Watershed Web Portal Libraries**
Kevin J. Wolf, Wolf and Associates
- Surveying and Assessing River Restoration in California: A Progress Report**
George Mathias Kondolf, UC Berkeley

Integrating Science and Management

Session Chair:
Zachary C. Hymanson, CBDA

- Science-Based Planning for the South Bay Salt Pond Restoration Project**
Lynne A. Trulio, SJSU
- San Francisco Bay Mercury TMDL—A Science-Based Adaptive-Implementation Strategy**
Thomas E. Mumley, SFBWRQCB
- USGS Adaptive Management Approach for Mitigating Mercury Sources Under TMDL Guidelines**
Alexander W. Wood, USGS
- The Ecological Scorecard: Refinements for Finer Scale Bay Delta Assessment**
Anitra L. Pawley, The Bay Institute
- Identifying Indicators of Ecosystem Health and Measures of Restoration Effectiveness for the Sacramento and Cosumnes Rivers**
Ramona Swenson, TNC

12:10 PM

LUNCH

Central Valley Salmonids (III)

Session Chair:
Randall L. Brown, DWR (retired)

Floodplains and Riparian Systems (III)

Session Chair:
Jeff Opperman, UC Davis

Re-Emergence of Shallow Water Ecosystems Across the Bay and Delta (I)

Session Chair: Charles A. Simenstad,
Univ. of Washington

Drinking Water Quality (III): Delta

Session Chair: Lisa Holm, CBDA

Data and Advocacy—What Is the Role for Environmental Justice? (I)

Session Chair: Paula A. Daniels, UCLA

1:10 PM

Utility of Juvenile Salmon Growth Models for Discrimination of Central Valley Spring-Run Chinook in California
Tracy R. McReynolds, CDFG

Successful Riparian Restoration Results in Increasing Valley Elderberry Longhorn Beetle Colonization
Helen L. Swagerty, River Partners

Physical and Ecological Characteristics of the Historical Baylands of South San Francisco Bay
Robin M. Grossinger, SFEI

Cryptosporidium and Giardia Recoveries in Delta and State Water Project Waters Using EPA Method 1623
Carol L. DiGiorgio, DWR

The Science of Environmental Justice
Luke Cole, Center on Race, Poverty & the Environment

1:30 PM

Spring Chinook Restoration and Monitoring in Clear Creek, California
Matthew R. Brown, USFWS

Diversity and Abundance of Riparian Birds in the Central Valley: Identifying and Evaluating Indicator Species
Nadav Nur, PRBO

Breaching Levees: Conceptual Models of Restoration Outcomes along the Bay-Delta Estuarine Gradient
Denise J. Reed, Univ. of New Orleans

The Effects of Delta Operations on Delta Drinking Water Quality
Richard A. Denton, CC Water District

Addressing Environmental Justice Concerns in Scientific Environmental Policy Discourses
Running-Grass, US EPA

1:50 PM

Direct and Indirect Methods for Estimating Juvenile Winter Chinook Production in the Upper Sacramento River
Phillip D. Gaines, USFWS

Abundance Patterns of Landbirds in Restored and Remnant Riparian Forests on the Sacramento River, California
Geoffrey R. Geupel, PRBO

Breaching Levees: Variation in Responses and Predictions across the Bay-Delta Gradient
Charles A. Simenstad, University of Washington

Assessment of Delta Recreation Impacts on Drinking Water Quality
David Briggs, CC Water District

Degradation of Fishery Resources by Bioaccumulative Contaminants: Prospects for Reducing Contamination and Human Exposure
James G. Wiener, Univ. of WI-La Crosse

2:10 PM

Movements of Adult Chinook Salmon in Response to Flow in the Sacramento-San Joaquin Delta
Derek M. Stein, CDFG

Landbird Response to Restoration: Integrating Monitoring Results into Restoration Actions at Clear Creek
Ryan D. Burnett, PRBO

Sediment Sources for Local Tidal Marshes in the San Francisco Estuary
Frances P. Malamud-Roam, UC Berkeley

RTDF: Real Time and Forecasted Water Quality Data from the Watershed to the Treatment Plant
Richard Breuer, DWR

Sport Fish Contamination in the Bay-Delta Watershed
Jay A. Davis, SFEI

2:30 PM

Vernalis Adaptive Management Plan (VAMP)—2000 Through 2004
Charles H. Hanson, Hanson Environmental, Inc.

Using Birds to Evaluate Riparian Restoration at Multiple Sites in the San Joaquin Valley/Delta Region
Julian Wood, PRBO

Ecological Values of Shallow Water Habitat in the Delta
Cary B. Lopez, USGS

Emerging Contaminants—What They Mean to Public Water Supply
Jerry Ongerth, EBMUD

Geographic and Demographic Distribution of Anglers and Mercury in Bay-Delta Fish
Fraser M. Shilling, UC Davis

2:50 PM

BREAK

Central Valley Salmonids (IV)

Session Chair:
Randall L. Brown, DWR (retired)

Watershed Perspectives: Collaboration to Ecosystem Processes (I)

Session Chairs: Ted M. Frink, DWR,
and Stephan G. Lorentz

Re-Emergence of Shallow Water Ecosystems Across the Bay and Delta (II)

Session Chair: Charles A. Simenstad,
Univ. of Washington

Drinking Water Quality (IV): Treatment Technologies

Session Chair: Pankaj Parekh,
Los Angeles Dept. of Water & Power

Data and Advocacy—What Is the Role for Environmental Justice? (II)

Session Chair: Paula A. Daniels, UCLA

3:10 PM

The Importance of Estuarine Rearing to the Production of Chinook Salmon in the Central Valley
Patricia L. Brandes, USFWS

Building Collaborative Partnerships to Restore Riparian Habitat: The Lower Mokelumne River Watershed Stewardship Program
Kent A. Reeves, EBMUD

Plant Communities Affect Carbon Dynamics and Environmental Factors in a Restored Wetland in the Delta
Robin L. Miller, USGS

Minimizing Bromate Formation in Ozonated State Project Water Using Carbon Dioxide
Issam Najm, Water Quality & Treatment Solutions, Inc.

Environmental Justice and Developing California Fish Consumption Advisories
Robert K. Brodberg, Office of Environmental Health Hazard Assessment

3:30 PM

Evaluation of an Alaskan Weir and Vaki Infrared System to Count and Characterize Adult Salmonids
Doug Demko, SP Cramer & Associates

The Development of WEHY for the Last Chance Creek Watershed
M. Levent Kavvas, UC Davis

Spatial Organization in a Pacific Salt Marsh Food Web: Implications for Trophic Transfers between Habitats
J. Letitia Grenier*, UC Berkeley

Advanced Pretreatment Using Ion Exchange for Organic Carbon Removal from Delta Water
William A. Taplin, MWH

Environmental Justice from Design to Message
Ian R. Walker, Environmental Health Investigations Branch

3:50 PM

Evaluation of the Supplementation Program at Livingston Stone NFH Using the Winter Chinook Salmon Escapement Survey
Robert E. Null, USFWS

Influence of Landslides on Water Quality and Aquatic Habitat in Selected Creeks in the Bay-Delta Watershed
Sarah Pearce, SFEI

Rapid Response of Avian Communities to Hydrologic Changes in the Napa-Sonoma Salt Ponds
Nicole D. Athearn, USGS

Treating California State Project Water to Meet Future Regulations—Engineering & Economic Implications
Issam Najm, Water Quality & Treatment Solutions, Inc.

Farmers and Restoration: Strategic Decision Models Using Survey Data for the Sacramento River Conservation Area
Mark Buckley*, UC Santa Cruz

4:10 PM

Escapement, Ocean Harvest and Straying of Hatchery and Natural Chinook Salmon in the Mokelumne River, California
Joseph J. Miyamoto, EBMUD

Channel Conditions and Sediment Dynamics in the Cosumnes River Watershed
Gerrit A. J. Platenkamp, Jones & Stokes Associates

New Bioengineering Techniques Prove Successful in Restoration of the Delta In-Channel Islands
Richard Nichols, EDAW Inc.

PANEL DISCUSSION

How Good Is our Scientific Understanding of Water Quality Factors, Processes, and Risk?
Moderator: Steve Macaulay, CA Urban Water Agencies

PANEL DISCUSSION

Data and Advocacy—What Is the Role for Environmental Justice?
Moderator: Ken McGhee, CBDA

4:30 PM

The Feather River Hatchery and Central Valley, California Chinook Salmon and Steelhead
Randall L. Brown, DWR (retired)

A Multiple Watershed Approach to Assessing the Effects of Habitat Restoration Actions on Fish Populations
David R. Marmorek, ESSA Technologies Ltd.

Liberty Island: From Tomatoes to Tules in Seven Years
Randall C. Mager, DWR

4:50 PM

BREAK

5–8:00 PM

POSTER SESSION AND RECEPTION—Ballroom (Third Floor)

WEDNESDAY • OCTOBER 6

Fish Room 313

Central Valley Salmonids (V)

Session Chair:
Randall L. Brown, DWR (retired)

8:30 AM **Central Valley Winter Run Chinook Salmon Model**
Steven P. Cramer, SP Cramer & Associates

8:50 AM **Population Trends and the Influence of Restoration Actions on Winter-Run Chinook Salmon**
Wim Kimmerer, SFSU

9:10 AM **Assessing Chinook Salmon Population Status Using a Multi-Metric Index**
Christina Swanson, The Bay Institute

9:30 AM **Thoughts on Monitoring Central Valley Salmon and Steelhead**
John Williams

9:50 AM **Biology Of Central Valley Salmonids—Session Summary**
Randall L. Brown, DWR (retired)

10:10 AM

Native and Resident Fishes (I)

Session Chairs:
Frederick V. Feyrer, DWR, and
Matthew L. Nobriga, DWR

10:30 AM **Introduction to the Session: Implications for Conservation and Restoration in the San Francisco Estuary**
Frederick V. Feyrer, DWR

10:50 AM **Trends in Spring Fish Assemblages in the Lower Sacramento and San Joaquin Rivers and Delta, 1994-2002**
Jason T. May, USGS

Watershed Room 314

Watershed Perspectives: Collaboration to Ecosystem Processes (II)

Session Chairs: Stephan G. Lorenzato, DWR, and Ted M. Frink, DWR

Upper Yuba River Studies Program: Science and Decision Making in a Collaborative Environment
David B. Christophel, CH2M HILL

Sediment Transport in the Upper Yuba River Watershed, 2001-03
Jennifer A. Curtis, USGS

Rates and History of Sediment Accumulation Behind Englebright Dam
Noah P. Snyder, USGS and Boston College

Spatially Distributed Model of Flow and Sediment Transport in the Upper Yuba River Watershed
Lorraine E. Flint, USGS

Mercury and Methylmercury in the Upper Yuba River Watershed: Fluvial Transport and Reservoir Sedimentation
Charles N. Alpers, USGS

Managing and Restoring Big Rivers Below Big Dams (I)

Session Chair: Tim Ramirez, CBDA

Scaling Big Rivers: A Long-Term Rehabilitation Strategy for Central Valley Alluvial Rivers?
Scott M. McBain, McBain & Trush

Channel Changes and Bed Mobility on the San Joaquin River Below Friant Dam
J. Cain, Natural Heritage Institute

Ecosystem Room 315

Physical Controls on Habitats and Restoration

Session Chair:
Mark T. Stacey, UC Berkeley

The Influence of Submerged Aquatic Vegetation on the Hydrodynamics in Franks Tract-Observations and Modeling
Deanna M. Sereno*, UC Berkeley

Hypothesis-Driven River Rehabilitation on Three Californian Streams
Gregory B. Pasternack, UC Davis

Controls on Migration Rates in the Sacramento River and Implications for Improving Prediction of Meander Migration
Candice R. Constantine, UC Santa Barbara

Suspended-Sediment Transport Where Rivers Become an Estuary: Sacramento-San Joaquin River Delta, Water Years 1999-2002
Scott A. Wright, USGS

Sediment Supply Control on Intertidal Mudflat and Subtidal Habitats in North San Francisco Bay
Bruce E. Jaffe, USGS

Effects and Management of Nonnative Invasive Species

Session Chair:
Lia McLaughlin, US FWS

Evolution of Invasive *Spartina* Hybrids in San Francisco Bay
Debra R. Ayres, UC Davis

The Invasive Potential and Ecological Tolerance of the Recently Discovered *Spartina densiflora* x *foliosa* Hybrid
Alex K. Lee*, UC Davis

Water Quality Room 202

Contaminants: Sources and Effects (I)

Session Chair:
Joy Cooke Andrews, CSU Hayward

Managing Bay Priority Pollutants: Conceptual Models for Mercury, PCBs, Legacy Pesticides, Dioxins, Diazinon and Selenium
Mike Connor, SFEI

Spatial Analysis of Sediment Ages in North San Francisco Bay
Shawn A. Higgins, USGS

Suspended Sediment and Mercury Loads Entering San Francisco Bay from the Central Valley via the Delta
Lester J. McKee, SFEI

Simulation of Dewatering Techniques to Identify Methods to Limit Mercury Methylation in Upland Placed Sediments
Scott Bodensteiner, MEC—Weston Solutions, Inc.

Spatial and Temporal Distribution of Copper in the Bioindicator Clam, *Corbicula fluminea*, in the Delta
Cynthia L. Brown, USGS

Contaminants: Sources and Effects (II)

Session Chair:
Kathryn M. Kuivila, USGS

Maternal Transport and Developmental Toxicity of Selenium in White Sturgeon, *Acipenser transmontanus*
Regina G. Linville*, UC Davis

The Occurrence and Transport of Persistent Organic Contaminants in Urban Runoff Discharged to San Francisco Bay
Jon E. Leatherbarrow, SFEI

Integrative Science Room 203

Water Supply

Session Chair:
Gerald E. Johns, DWR

Environmental Water Account (EWA)—Managing Uncertainty to Achieve Success
Timothy G. Rust, USBR

Water Supply Management with Climate Warming for California: Some Preliminary Results
Jay Lund, UC Davis

Enhanced Water Supply Forecasting in Central Valley Basins Using Climate Signals
Levi D. Brekke, USBR

Desalinated Agricultural Drainage Water: A Potential New Water Supply Resource in California
Ronald J. Enzweiler, WaterTech Partners

Counting the Savings: A Water Savings Calculation Model for California's Urban Water Conservation BMPs
David Mitchell, M Cubed

Climate (I)

Session Chair:
Michael Dettinger, USGS

Multiple Modes of Long-Term Hydrological Variability: Evidence from High Resolution Lake Records and Tree-Rings
Glen M. MacDonald, UCLA

Species Dependence of Dendrohydrologic Drought Signal in San Joaquin Basin
David M. Meko, Univ. of Arizona

BREAK

11:10 AM	Nearshore Fishes of the Sacramento-San Joaquin Delta, California Larry R. Brown, USGS	Spawning Gravel Augmentation: Add It and They Will Come Randall C. Mager, DWR	Impacts of Non-Native Pepperweed on San Francisco Bay Area Tidal Marsh Bird Populations Hildie Spautz, PRBO	Modeling Techniques that Account for Transport and Distributed Dose in Environmental Population Dynamics Timothy R. Ginn, UC Davis	Spring Snowmelt Runoff Surges in Sierra Watersheds Daniel R. Cayan, Scripps Institution of Oceanography and USGS
11:30 AM	Shallow Water Habitat Fish Assemblages in the Sacramento-San Joaquin Delta: What Factors Really Matter? Frederick V. Feyrer, DWR	Changes in Salmon Spawning and Rearing Habitat Associated with Channel Restoration Mark F. Gard, US FWS	Salinity Effects on Perennial Pepperweed Recruitment in California Tidal Wetlands Renee O. Spenst*, UC Davis	Effects of Chlorpyrifos and Esfenvalerate on Juvenile Chinook Salmon Inge Werner, UC Davis	Relationship Between Atmospheric Circulation and Snowpack in the Western United States Jiming Jin, UC Berkeley
11:50 AM	Lurking in the Shallows: Ecology of Piscivorous Fishes in Nearshore Habitats of the Sacramento-San Joaquin Delta Matthew L. Nobriga, DWR	The Coarse Sediment Conveyor Belt: Bedload Sampling and Modeling Results, and River Rehabilitation Management Implications Darren Mierau, McBain & Trush	The Effectiveness of Controlling <i>Eichhornia crassipes</i> Growth with Mechanical Methods N. Alison Toy*, UC Berkeley	Debunking the Myths Surrounding Pyrethroid Pesticides: Misconceptions on Their Use, Measurement and Ecological Effects Donald P. Weston, UC Berkeley	Temperature-Driven Advances in Snowmelt-Derived Streamflow Timing throughout Western North America Could Impact Water Supplies for California Iris T. Stewart, Scripps Institution of Oceanography
12:10 PM	LUNCH				
	Native and Resident Fishes (II) Session Chairs: Frederick V. Feyrer, DWR, and Matthew L. Nobriga, DWR	Managing and Restoring Big Rivers Below Big Dams (II) Session Chair: Scott M. McBain, McBain & Trush	Restoring and Managing California's Native Grasslands (I) Session Chair: Jeanne L. Wirka, Audubon California Landowner Stewardship Program	Water and Sediment Quality (I) Session Chair: Christopher G. Foe, CVRWQCB	Climate (II) Session Chair: Daniel R. Cayan, Scripps Institution of Oceanography and USGS
1:10 PM	Shallow Water Habitat Creation: Do No Harm? Andrew K. Rockriver, CDFG	Meeting the Goals of Ecosystem Restoration: A Balancing Act Michael Harris, WSRCD	Short-Term Monitoring Results and Their Implications for Native Grassland Restoration Projects Implemented on Private Lands Jeanne L. Wirka, Audubon California Landowner Stewardship Program	Water Diversion as an Ecosystem Disturbance: Four Examples from the Delta Nancy E. Monsen, USGS	Variability of Agricultural Water Demands as Contained in Potential Evapotranspiration Estimates from the CIMIS System Hugo Hidalgo, Scripps Institution of Oceanography
1:30 PM	Brackish Tidal Marsh in the San Francisco Estuary: The Other Shallow Water Habitat Robert E. Schroeter*, UC Davis	Geomorphic Monitoring of Phase 3A of the Lower Clear Creek Floodplain Rehabilitation Project Smokey A. Pittman	Incorporating Native Grass into Riparian Restoration on the Sacramento River: A Five-Year Review Daniel S. Efseaff, River Partners	The Estuary Geometry Is Not Static: Perspective on Salinity Trends from Natural and Human Influences Christopher S. Enright, DWR	Meteorological Drought in California and the Greater West Alexander Gershunov, Scripps Institution of Oceanography
1:50 PM	Ecology of Age-0 Splittail in the Lower San Francisco Estuary Watershed Frederick V. Feyrer, DWR	Clear Creek Stream Channel Restoration: Habitat Use of a Large-Scale Restoration Project by Chinook Salmon Jess M. Newton, US FWS	Five Years of Native Grass Restoration at Sacramento National Wildlife Refuge Complex Joseph G. Silveira, US FWS	Dissolved Oxygen and Temperature Studies of the In-Delta Storage Project Haridarshan L. Rajbhandari, DWR	Storminess Variability Along the California Coast: 1858–2000 Peter D. Bromirski, Scripps Institution of Oceanography
2:10 PM	A Tale of Splits: Genetic Analysis Reveals Separation Between Sacramento Splittail Populations Melinda Baerwald*, UC Davis	Channel Response to Dam Removal, Clear Creek, California Peter Miller*, UC Berkeley	Variation in the Success of Seeded Native Bunchgrasses in Rangeland Foothills of Yolo County, California Megan E. Lulow*, UC Davis	Recommended Approach for Solving the Low-DO Problem in the SJR Deep Water Ship Channel G. Fred Lee, G Fred Lee & Associates	Application of a Multi-Model Combination Approach in Predicting Water Supply for California Watersheds Qingyun Duan, Lawrence Livermore National Laboratory
2:30 PM	Combining Models to Explore Hydrology-Mediated Variability in Sacramento Splittail Populations: Interdisciplinary Problem Solving Steven D. Culbertson, DWR	Mercury Associated With Gold Dredge Tailings in the Clear Creek and Trinity River Watersheds, California Roger P. Ashley, USGS	Differences in Soil Quality and Plant Characteristics among Restored and Non-Restored Sites Using Native Perennial Grasses Stephen Griffith, USDA-ARS	Spatial and Temporal Dynamics of Sestonic Algae in the San Joaquin River Randy A. Dahlgren, UC Davis	Design Considerations for a High Elevation Climate Monitoring Network in Support of CalFED Kelly Redmond, Desert Research Institute
2:50 PM	BREAK				

(Continued on page 10)

WEDNESDAY • OCTOBER 6

(Continued from page 9)

Fish Room 313

Native and Resident Fishes (III)

Session Chairs: Frederick V. Feyrer, DWR, and Matthew L. Nobriga, DWR

Watershed Room 314

Managing and Restoring Big Rivers Below Big Dams (III)

Session Chair:
Bruce K. Orr, Stillwater Sciences

Ecosystem Room 315

Restoring and Managing California's Native Grasslands (II)

Session Chair: Jeanne L. Wirka,
Audubon California Landowner
Stewardship Program

Water Quality Room 202

Water and Sediment Quality (II)

Session Chair:
Christopher G. Foe, CVRWQCB

Integrative Science Room 203

Climate (III)

Session Chair:
Kelly Redmond,
Desert Research Institute

3:10 PM **Status of Delta Smelt: Multi-Decadal Trends in Abundance, Distribution and Water Management**
Kevin J. Fleming, CDFG

3:30 PM **One Fish, Two Fish, Three Fish, Four: Estimating Abundance and Mortality for the Threatened Delta Smelt**
Bill Bennett, UC Davis

3:50 PM **Modeling the Canary: How Do We Assess Population Viability for the Threatened Delta Smelt?**
Kristen T. Honey*, UC Santa Cruz

4:10 PM **Use of Otolith Chemistry to Determine Natal Sources for Delta Smelt in the SFE**
James A. Hobbs*, UC Davis

4:30 PM **Maternal Transfer of Xenobiotics and Effects on Larval Striped Bass in the San Francisco Estuary**
David J. Ostrach*, UC Davis

4:50 PM

Evaluating the Effects of Flow on Aquatic Invertebrate Communities in the Lower Tuolumne River, California
Bruce K. Orr, Stillwater Sciences

Bass Monitoring at Tuolumne River Restoration Sites as an Indicator of Chinook Salmon Predation Risk
Anthony J. Keith, Stillwater Sciences

Seed Release Patterns of Native Riparian Trees and Implications for Flow-Based Restoration Strategies
John C. Stella*, UC Berkeley and
Stillwater Sciences

Hydrologic Alterations to the Sacramento River and the Effects on Cottonwood Seedlings
Vicky L. Snowden*, US EPA

Hydraulic Modeling to Design Flood-Neutral Riparian Revegetation Plantings
Tom Griggs, River Partners

Grazing Maintains Diversity in Seasonal Wetlands
Jaymee Marty, TNC

Diet Preference of Sheep Grazing *Bromus hordeaceus* and *Nassella pulchra*
Emilio A. Laca, UC Davis

Habitat Associations of Grassland Birds in Native and Exotic California Grasslands
Jan H. Goerissen*, UC Davis and UCNRS

Controlling Invasive Species within Native Communities: Monitoring and Management in a Valley Vernal Pool/Grassland Habitat
Niall F. McCarten, Environmental
Science Associates

Using Remote Sensing to Help Landowners Assess the Impact of Management Strategies on Rangeland Restoration
Carolyn M. Malmstrom,
Michigan State Univ.

Phosphorus Load Reduction Goals for the San Joaquin River Near Vernalis
Erwin E. Van Nieuwenhuysse, USBR

Tracing Sources of Organic Matter and Nitrate in the San Francisco Bay-Delta-River Ecosystem Using Isotopic Techniques
Carol Kendall, USGS

Using Experimental Enclosures to Monitor Water Quality of the San Francisco Bay-Delta for Management Purposes
Richard Dugdale, SFSU

Nutrient Export Following Removal of a Low-Head Dam, Murphy Creek, California
Dylan S. Ahearn, UC Davis

Effects of a Controlled Water Release on Water Quality in the Mokelumne River, California
Solomon Henson*, UC Davis

Characterizing the Uncertainties Associated with 21st Century Climate Projections for California
Michael Dettinger, USGS

Economic Impacts of Changing Climate and Water Supply
Larry Dale, Lawrence Berkeley National
Laboratory and UC Berkeley

Impacts of Climate Change on Management of California's Water Resources: Part I—Work Plan Overview
Levi D. Brekke, USBR

Impacts of Climate Change on Management of California's Water Resources: Part II—CVP and SWP Operations
Messele Ejeta, DWR

Impacts of Climate Change on Management of California's Water Resources: Part III-Delta Water Quality
Jamie D. Anderson, DWR

ADJOURN

REGISTRATION

Online Registration!

Participants are encouraged to register online.
<http://www.iep.water.ca.gov/calfed/sciconf/2004/>

Questions about registration?

Debbi Nichols: dln@rb2.swrcb.ca.gov

Questions about the scientific program?

Anke Mueller-Solger: amueller@water.ca.gov
David Schoellhamer: dschoell@usgs.gov

Questions about the poster session?

Bellory Fong: bfong@water.ca.gov
Jana Machula: janam@calwater.ca.gov

Registration by mail:

Complete the registration form and mail it with the fee to the San Francisco Estuary Project, 1515 Clay Street, Suite 1400, Oakland, CA 94612.

Make check payable to SFEP/ABAG. (510) 622-2304. (510) 622-2501 fax.

Cost:

October 4, 5, and 6 \$145 _____
(Includes 3 lunches, 2 receptions, Abstract Book)

After September 16, 2004 \$165 _____
(Includes 3 lunches, 2 receptions, Abstract Book)

Two days, October 4 or 5 or 6 (circle two) \$130 _____
(Includes 2 lunches, reception, Abstract Book)

One day only, October 4 or 5 or 6 (circle one) \$65 _____
(Includes lunch, reception, and Abstract Book)

Students (3 days, with student ID) \$50 _____
(Includes 3 lunches, 2 receptions, Abstract Book)

Students (1 day, with student ID) October 4 or 5 or 6 (circle one) \$25 _____
(Includes lunch, reception, and Abstract Book)

Total Amount _____

Lunch Preference: Regular _____ Vegetarian _____

Check days you need lunch: October 4 _____ 5 _____ 6 _____

Name (print) _____

Affiliation _____

Address _____

City _____

State _____

Zip _____

Phone _____

Fax _____

Email _____

I enclose \$ _____

Visa / MC / AE (circle one)

Card No. _____

Exp. _____

Cardholder's Name (print) _____

Signature _____

A confirmation letter and map will be sent upon receipt of the Registration form. Refunds for cancellation will be given if requested by September 29, 2004. To receive a refund, a follow-up written request is required by November 8, 2004. For further information, please check the conference Web site, <http://www.iep.water.ca.gov/calfed/sciconf/2004/>



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